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July 11, 1995

Mr. William F. Caton, Acting Secretary  
Federal Communications Commission  
Room 222  
1919 M Street, N.W.  
Washington, D.C. 20534

RECEIVED

JUL 12 1995

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

Re: Amendment of Part 95 of the  
Commission's Rules to allow  
Interactive Television and Data  
Service licensees to provide  
mobile service to subscribers;  
WT Docket No 95; RM-8476

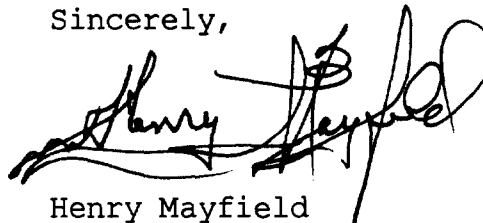
DOCKET FILE COPY ORIGINAL

Dear Mr. Caton:

Transmitted herewith for filing in the above-captioned proceeding, are an original and five copies of Reply Comments of Henry Mayfield on the Notice of Proposed Rule Making for IVDS.

Please contact me if you have any questions about filing.

Sincerely,



Henry Mayfield

Enclosures

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Before The  
**THE FEDERAL COMMUNICATION COMMISSION**  
Washington, D.C. 20554

RECEIVED

JUL 12 1995

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )  
 )  
Amendment of Part 95 of ) **WT Docket No. 95-47**  
Commission's Rules to allow ) **RM-8476**  
Interactive Video and Data )  
Service licensees to provide )  
mobile service to subscribers )

To: The Commission

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REPLY COMMENTS TO NOTICE OF PROPOSED RULE MAKING

I. INTRODUCTION

Henry Mayfield ("I") hereby submit Reply Comments to the above-captioned proceeding. As an engineer and Interactive Video and Data Service ("IVDS") winning bidder of the New Brunswick/Perth Amboy MSA, I have a direct interest in ensuring that the Notice of Proposed Rule Making ("NPRM") to amend IVDS Rules include my Reply Comments.

My comments strongly supported the Commission's NPRM.<sup>1</sup> Additionally, I requested the Commission to allow maximum flexibility in IVDS design, specifically in the following areas: retain the 20 watt maximum ERP for fixed RTUs; relax restrictions: on the 5 second per hour duty cycle for all RTUs; on providing mobile service on an ancillary basis; and on the maximum ERP of 100 milliwatts for mobile RTUs.

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<sup>1</sup> Comments to NPRM submitted 26 June 1995

Finally, I requested the Commission to require IVDS system manufacturers to provide engineering analyses to support their licensees' push for greater technical flexibility.

I am pleased that most commenters generally agreed with the NPRM subject to some changes or modifications. Brown and Schwaninger ("BS") is the only commenter I take issue with. Reply Comments will be given for BS.

## **II. SUMMARY COMMENTS OF BROWN AND SCHWANINGER**

BS rejects the request to allow IVDS operators the ability to provide (1) any service which does not include the concurrent provisions of interactive video and data service; (2) any service which is defined by other portions of the Commission's Rules as dispatch services or paging services or community repeater services; or (3) any ancillary services which was not clearly expressed in the Commission's decision prior to the holding of the IVDS auctions which would work a surprise on the public and provide an unexpected windfall to the winners at the auctions at the expense of legitimate licensed paging and two-way operators.

### **A. OPPOSITION TO BS COMMENT NUMBER 1**

I oppose all three (3) of BS's comments. As for Comment Number One (1), any service which does not include the concurrent provisions of interactive video and data service, I oppose it for the following reasons.

I agree with many commenters requesting the Commission to permit mobile service on a non-ancillary basis. Alternatively, I request the Commission to make three exceptions for non-ancillary mobile service: The first is for interactive video being provided by another service provider such as telephone or cable TV companies. The second is for fixed services where excess capacity is being provided to a data subscriber. Finally, the third is for a school, university or some other institution or organization that can not afford or do not need fix service, but require mobile services to perform functions benefiting society such as providing education, information, or training.

The first exception is for interactive video being provided by another service provider. Licensees are beginning to build out their systems at the time that cable TV companies are upgrading systems to offer the same or more services.<sup>2</sup> Cable companies have the advantage because they have more bandwidth to offer more services and most importantly, they already have subscribers which to market their services.

Similarly, AT&T is launching a TV Information Center which can provide: Headline News; Home Banking; Show Alert (on-screen broadcast and cable programs and times); Investment, Sports, Traffic, and Weather Information;

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<sup>2</sup> "Inside The SET-TOP BOX," *IEEE SPECTRUM*, April 1995, Pg 70.

as well as many telephone answering system functions such as on-screen display of caller's name, number, time, day and duration of all messages as well as many more functions.<sup>3,4,5,6</sup>

Likewise, AT&T plans to take full advantage of the world's biggest consumer-distribution channels: the AT&T Consumer Communications Services unit, which sends bills to more than 80 million customers a month.<sup>7</sup> Database marketing is a powerful tool.<sup>8</sup> AT&T's customer database enables them to improve targeting of potential subscribers as well as tailor marketing messages and services more specifically to subscriber groups.<sup>9,10</sup> They also intend to offer discounts to people who make a certain amount of calls.

The second exception is for fix services where excess capacity is being provided to a data subscriber. Mobile services should also be allowed for this subscriber. The rationale is that mobile services are an evolution of fixed services which is similar to portable computing evolving from desktop computing.

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<sup>3</sup> TV Information Center brochure obtained at the Consumers Electronics Show in Las Vegas, Nevada, 6-9 January 1995

<sup>4</sup> "Multimedia By Trial And Error," *Business Week*, 5 June 1995, Pg 113.

<sup>5</sup> "Paying bills by TV," *USA Today*, 7 June 1995, Pg 2B.

<sup>6</sup> "Price may not be right, but you can soon pay bills via TV," *San Jose Mercury News*, 7 June 1995, Pg 2F.

<sup>7</sup> "AT&T to Announce It Will BE Offering New Data Services," *The Wall Street Journal*, 6 June 1995, Pg B6.

<sup>8</sup> "DATABASE, A Potent New Tool For Selling," *Business Week*, 5 September 1994, Pg 56.

<sup>9</sup> "The Coming of Knowledge-Based Business," *Harvard Business Review*, Sept/Oct 1994, Vol 72, No 5, Pg 165.

<sup>10</sup> "Database Marketing: New Rules for Policy and Practice," *Sloan Management Review/Summer*, 1993, Pg 7.

The final exception is for schools, universities, or other institutions or organizations ("institutions/organization") that can not afford or do not need fix service, but require mobile services to perform functions benefiting society such as providing education, information, or training.

Many of these institutions/organizations cannot afford the RTU or set-top box for fix services. For example, the TV set-top box for Eon's market trial in Washington will cost \$1,250.<sup>11</sup> By the second quarter of 1995, Eon expects boxes to cost \$600 per unit. Eligibility for mobile services requires these institutions/organizations to subscribe to fix services. Accordingly, these institutions/organizations will be deprived of mobile services resulting in a great lose to society, specifically the recipients of the benefit provided by the service.

As a former mathematics teacher with over 20 years of teaching experience at the University of the District of Columbia ("UDC"), I have had the opportunity to discuss IVDS educational applications with friends and former colleagues at UDC, Howard University, American Mathematical Society, and the National Science Foundation. They all agree that there are many uses for both fix and mobile services. However, they also agree that inner city schools and kids cannot afford the fix service and may not be able to afford the mobile service.

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<sup>11</sup> "Eon releases prices; aims to spur IVDS construction," *Broadcasting and Cable Magazine*, 7 November 1994

However, I anticipate that mobile services will be cheaper than fix services because the mobile unit is simpler to manufacture.

Unfortunately, these recipients represent those most needing either service for "distant learning." For example, "Blacks watch more hours of television programming in every time slot than non-blacks ...."<sup>12</sup> By granting this exception, the Commission could play a major role in helping society mold the minds of future generations as well as giving them a name rather than chancing them to become nameless like "Generation X," the label media has bestowed upon our young adults.

**B. OPPOSITION TO BS COMMENT NUMBER 2**

As for Comment Number Two (2), any service which is defined by other portions of the Commission's Rules as dispatch services or paging services or community repeater services, I oppose it for the following reasons. I am not familiar with the Commission's Rules for defining dispatch services or cable services. However, I am familiar with IVDS and its similarities to dispatching and paging services. Again, mobile services is a natural outgrowth of fixed services. To see this, we need insight on how a RTU or TV set-top box operates.

The TV set-top box and associated equipment that provides the response channel or return path is basically a special purpose computer without a monitor.

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<sup>12</sup> "A Television Trend: Audiences in Black and White," *The Washington Post*, 29 November 1994, Pg 1.

When connected to a TV set, it becomes a special purpose computer which uses the TV screen as a monitor.

Accordingly, we can send computer messages to other computers without human intervention or using a dispatch. Also messages can be sent from one computer to many computers (point-to-multipoint), or many computer messages-to-one computer (multipoint-to-point). As far as paging is concerned, it can be categorized as one-way messaging over a wide area.<sup>13</sup>

The connection between the TV and computer is not new. Manufacturers such as Apple, Packard Bell, and other vendors have combined PC computing and TV reception.<sup>14,15,16</sup> Cable TV operators also have realized the value of this combination so now they are considering offering data services on the Internet so that subscribers can do desktop computing and TV viewing.<sup>17</sup>

### C. OPPOSITION TO BS COMMENT NUMBER 3

As for Comment Number Three (3), any ancillary services which was not clearly expressed in the Commission's decision prior to the holding of the IVDS auctions which would work a surprise on the public and provide an unexpected windfall to the winners at the auctions at the expense of legitimate licensed paging and two-way operators, I oppose it for the following reasons.

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<sup>13</sup> "Wireless Personal Communications: What is it ?," *IEEE Personal Communications*, April 1995. Pg 20.

<sup>14</sup> "TV Services Add Value to Desktop PCs," *BYTE*, October 1994, Vol 19, No 10, Pg 28.

<sup>15</sup> "VIDEO OVERLAYS -- turn PCs into TVs, ' *EDN*, 27 April 1995, Pg 67.

<sup>16</sup> "4th network to preview Fax-on-TV," *USA Today*, 11 April 1995, Pg 13E.

<sup>17</sup> "Snags for Interactive TV," *The New York Times*, 5 June 1995, Pg D1.



Even though the Commission had not decided to act on the Petition For Rule Making prior to the auction, comments and a reply comment were filed before the auction.<sup>18,19,20,21,22</sup>

Contrary to BS's contention, licensees do not expect to receive a windfall if the NPRM is approved. Rather licensees would view this as adding needed revenue to pay for their licenses and to build out their systems. According to the president of Radio Telecom & Technology (manufacturer of IVDS equipment), Mr. Louis Martinez estimates that most IVDS license winners paid five times too much for their licenses.

The average price per potential subscriber was \$1.99, compared with 52 cents paid by giant phone companies in similar recent auctions for much more lucrative next-generation cellular communications licenses.<sup>23</sup> In addition, a group of licensees Petitioned For Extraordinary Relief because they believed they overpaid for their licenses at the auction.<sup>24</sup>

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<sup>18</sup> *Comments*, MSTV, 25 May 1994

<sup>19</sup> *Comments*, ITV, Inc, 20 June 1994

<sup>20</sup> *Comments*, RTT, Inc, 20 June 1994

<sup>21</sup> *Reply Comments*, Eon, 5 July 1994

<sup>22</sup> *Clarification Comments*, RTT, Inc., 8 July 1994

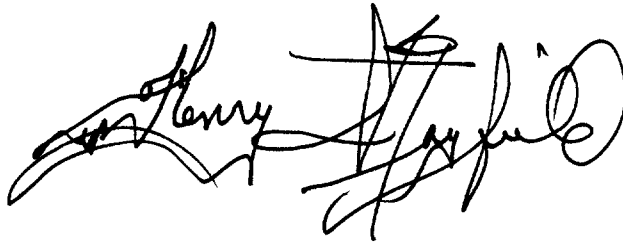
<sup>23</sup> "Interactive TV: The Leap Looks a Long Way Off," *The Washington Post*, 2 July 1995, Pg H1.

<sup>24</sup> *PETITION FOR EXTRAORDINARY RELIEF*, Filed by: IVDS/RLV Partnership, PP Docket No. 93-253, Filed: 26 Aug 1994

### **III CONCLUSION**

Now that the comment cycle has closed, the Commission can act quickly on them to amend part 95 of the Commission's Rules to allow IVDS licenses to provide mobile service to subscribers. In order to bring the benefits to licensees and the public, I encourage the Commission to proceed expeditiously, and set the shortest possible period to amend IVDS rules.

Respectively Submitted,

A handwritten signature in black ink, appearing to read "Henry Mayfield", with a large, stylized flourish at the end.

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